NuScale and Partner Universities Win Department of Energy Grants for Reactor Simulators

Release Date: Thursday, August 15, 2019 5:00 am PDT

Dateline City: PORTLAND, Ore.

Three of the company’s reactor simulators will be installed at Oregon State University, Texas A&M University-College Station and the University of Idaho

PORTLAND, Ore.--(BUSINESS WIRE)--NuScale Power today announced that the U.S. Department of Energy (DOE) has awarded three grants to support the installation of a NuScale reactor plant simulator at each of Oregon State University, Texas A&M University-College Station and the University of Idaho.

When completed, the simulator facilities will be used for research, education, K-12 outreach and public advocacy regarding nuclear power and small modular reactor (SMR) technology.

“We are very grateful to our university partners for their collaboration and eagerness to participate in this project, and to the Department of Energy for its continued support of NuScale’s groundbreaking work in the advanced nuclear industry,” said John Hopkins, Chairman and chief executive officer of NuScale Power. “These simulator facilities will create new research opportunities and help ensure that we educate future generations about the important role nuclear power and SMR technology will play in attaining a safe, clean and secure energy future for our country.”

NuScale’s reactor simulator is a virtual nuclear power plant control room that provides U.S. universities and national laboratories with the ability to observe nuclear plant behavior from the control room. These simulators, based on NuScale’s simulator technology and computer models, will include a simulator interface that accepts input from operators in a virtual control room and displays parameters simulating the plant response.

The simulator facilitates research into human factors engineering, human-system interface design, advanced diagnostics, cyber security and plant control room automation. In addition to supporting STEM research and education at universities, NuScale’s simulator can be used to show students and members of the public advanced nuclear technology in a control room setting.

Lead collaborators from each of the partner universities include Qiao Wu, Ph.D. (Oregon State University), Yassin Hassan, Ph.D. (Texas A&M University) and Richard Christensen, Ph.D. (University of Idaho).

“The installation of these three simulators will provide remarkable opportunities for students, researchers and operators to better understand SMR technology,” said NuScale Innovation Manager Derick Botha, who developed the project proposal on behalf of the company in collaboration with the university leads. “We are thrilled that DOE has given this endeavor such a strong endorsement.” After, deployment at each university, NuScale will provide technical support and further model development to support research.

NuScale’s technology is the world’s first and only SMR to undergo design certification review by the U.S. Nuclear Regulatory Commission (NRC). The NRC is scheduled to complete its review of NuScale’s design in September 2020.

About NuScale Power

NuScale Power is developing a new modular light water reactor nuclear power plant to supply energy for electrical generation, district heating, desalination, and other process heat applications. This groundbreaking small modular reactor (SMR) design features a fully factory-fabricated NuScale Power Module™ capable of generating 60 MW of electricity using a safer, smaller, and scalable version of pressurized water reactor technology. NuScale’s scalable design – a power plant can house up to 12 individual power modules – offers the benefits of carbon-free energy and reduces the financial commitments associated with gigawatt-sized nuclear facilities. The majority investor in NuScale is Fluor Corporation, a global engineering, procurement, and construction company with a 60-year history in commercial nuclear power.

NuScale is headquartered in Portland, Oregon and has offices in Corvallis, Ore.; Rockville, Md.; Charlotte, N.C.; Richland, Wash.; Arlington, Va.; and London, UK. Follow us on Twitter: @NuScale_Power [3], Facebook: NuScale Power, LLC [4], and Instagram: nuscale_power [5]. NuScale has a new logo, brand, and website [6]. Watch the short video [7].